

IN THE CLAIMS:

This Amendment is formatted in accordance with the revised format permitted at 1267 Official Gazette, entitled "Amendments In Revised Format Now Permitted".

47. (Previously Amended) A communication system in which a solid semiconductor element is used, comprising:

a plurality of liquid containers, each of which contains a liquid, in which said respective solid semiconductor elements are disposed so that each solid semiconductor element floats in the liquid of one of the liquid containers, respectively;

an oscillation circuit formed in said solid semiconductor element and provided with a conductor coil;

information acquiring means for acquiring the information in said container;

receiving means for receiving a signal from the outside;

information communicating means for transmitting the information to the outside when a predetermined response condition is satisfied;

an outside resonance circuit, disposed outside said plurality of liquid containers, for generating a power with respect to the oscillation circuit of said solid semiconductor element by electromagnetic induction; and

outside communication means for bidirectionally communicating with said receiving means and said information communicating means of said solid semiconductor element,

wherein a gravity center of the solid semiconductor element floating in the liquid is positioned below a center of the solid semiconductor element, and the floating solid semiconductor element rocks stably without rotating in the liquid, and

wherein a metacenter of the solid semiconductor element is constantly positioned above the gravity center of the solid semiconductor element.

48. (Original) The communication system according to claim 47, wherein said response condition differs with each container.

49. (Original) The communication system according to claim 48, wherein said response condition comprises an electromagnetic induction frequency.

50. (Original) The communication system according to claim 48, wherein said response condition comprises a communication protocol.

53. (Previously Amended) A liquid container in which an ink to be supplied to a liquid ejection head for ejecting a liquid droplet is contained, comprising:

a first chamber which is partially connected to atmosphere and in which an absorber for absorbing a liquid is contained;

a second chamber which is closed from the outside and in which said liquid is contained;

a connection path, disposed in the vicinity of a bottom portion of the container, for connecting said first chamber to said second chamber;

a supply port which is disposed in said first chamber, and via which the liquid is supplied to said liquid ejection head;

first monitor means, disposed in said first chamber, for monitoring a liquid amount of said first chamber, said first monitor means comprising a first solid semiconductor element which includes: at least pressure detection means for detecting a pressure fluctuation of the liquid; information communicating means for transmitting pressure information obtained by the pressure detection means; and energy converting means for converting an energy applied from the outside to an energy different from said applied energy to operate said pressure detection means and said information communicating means; and

a flow rate adjustment apparatus, disposed in said connection path, for adjusting a flow rate of said connection path in accordance with information from the first monitor means, wherein said flow rate adjustment apparatus is a second solid semiconductor element comprising: at least receiving means for receiving the pressure information transmitted from said first monitor means; an open/close valve which operates in response to said received pressure information; and energy converting means for converting an energy applied from the outside to an energy different from said applied energy to operate said receiving means and said open/close valve.

54. (Original) The liquid container according to claim 53, wherein second monitor means for monitoring the liquid amount of said second chamber is disposed in said

second chamber, and said flow rate adjustment apparatus is controlled in accordance with the information from the second monitor means.

56. (Previously Amended) The liquid container according to claim 53, wherein said first solid semiconductor element is disposed above a liquid surface of said first chamber when a liquid supply to said first chamber from said second chamber is possibly interrupted, and in a position in which a pressure fluctuation can be detected.

58. (Original) The liquid container according to claim 53, wherein said second monitor means is a third solid semiconductor element comprising: at least residual amount detection means for detecting a liquid residual amount; information communicating means for transmitting residual amount information obtained by the residual amount detection means to said flow rate adjustment apparatus; and energy converting means for converting an energy applied from the outside to an energy different from said applied energy to operate said residual amount detection means and said information communicating means.

59. (Original) The liquid container according to claim 58, wherein said solid semiconductor element floats on a liquid surface or in the liquid.

60. (Currently Amended) A liquid ejection recording apparatus comprising:

a liquid ejection head for ejecting a recording liquid droplet; and

the liquid container according to any one of claims 53, 54, 56, 58 or to 59 in which the liquid to be supplied to the liquid ejection head is contained.

61. (Previously Amended) The liquid ejection recording apparatus according to Claim 60, wherein said liquid ejection head utilizes a film boiling caused when the heat energy is applied to the liquid to eject the liquid droplet via a nozzle.

62. (Previously Added) The liquid container according to claim 59, wherein a gravity center of the solid semiconductor element floating in the liquid is positioned below a center of the element, and the floating element rocks stably without rotating in the liquid.

63. (Previously Added) The liquid container according to claim 62, wherein a metacenter of the solid semiconductor element is constantly positioned above the gravity center of the solid semiconductor element.